Infrastructure case study

ADELTE

HEMPEL
Trust is earned

ADELTE reduces maintenance by 30% at PortMiami with Avantguard 550

Seaport Passenger Boarding Bridges at PortMiami operate under constant exposure to saltwater, humidity and UV radiation — conditions that place extreme demands on durability and long-term asset performance.
For the new MSC Cruise Terminal, ADELTE designed four HYDRA Seaport Passenger Boarding Bridges with a clear focus on reliability, asset longevity and predictable lifecycle costs in a high-traffic marine environment.

Martin Westphal
ADELTE Group Marketing Director

"Integrating durability requirements from the design phase helps us reduce maintenance demands and extend the service life of critical port infrastructure."

Let's talk protective coatings for your project

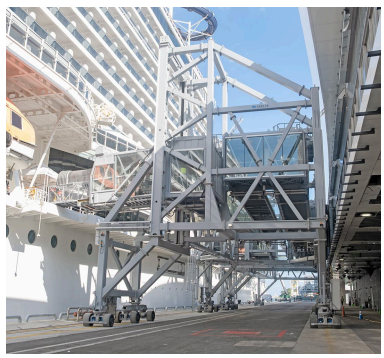
THE CHALLENGE

Engineering reliability for one of the world's most aggressive marine environments

At PortMiami, boarding bridges operate in a C5 high-corrosion marine environment, exposed continuously to saltwater, high humidity and intense UV radiation. Over time, these conditions accelerate steel degradation, increase maintenance demands and put pressure on the long-term reliability of critical infrastructure.

For the new MSC Cruise Terminal, ADELTE faced the challenge of delivering boarding bridges capable of supporting safe and precise docking, flexible boarding heights and continuous high-throughput operation, while limiting maintenance interventions, avoiding unplanned downtime and keeping lifecycle costs under control.

At the same time, all specifications were required to meet strict environmental and VOC regulations for U.S. port infrastructure. From the outset, the challenge was not only to protect steel — but to design confidence, durability and operational continuity into an asset that must perform flawlessly, every day, in one of the world's busiest cruise ports.



THE SOLUTION

Hempel delivered a three layer protective coating solution that combined strong corrosion protection, compliance and a durable visual finish

To secure long-term performance, durability requirements were integrated from the earliest design stage, ensuring that corrosion protection was embedded into the structure rather than addressed reactively during operation.

ADELTE specified a high-performance, multi-layer protective coating system designed for sustained corrosion resistance in C5 marine conditions and full compatibility with structural materials, fabrication processes and environmental regulations.

By defining coating performance early, the solution supports extended service life, reduced maintenance frequency and predictable lifecycle costs. This approach helps preserve asset availability over time and reinforces confidence in infrastructure that must perform flawlessly every day, in one of the world's most aggressive port environments.

At a glance

CUSTOMER
ADELTE, The Boarding Company

PROJECT NAME
MSC's Cruise Terminal in PortMiami

ASSET
4 HYDRA Seaport Passenger Boarding Bridges

LOCATION
PortMiami, Florida (USA)

COATING SYSTEM
Hempadur Avantguard 550,
Hempadur 47300,
Hempathane Topcoat 55210

APPLICATION DATE
2024